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REMARKSClaim Objections in Prior Office Action

The objections to claims 8 and 13-16 set forth in the Office action mailed 12/03/2007 were not repeated in the Office action mailed 06/12/2008. Applicants assume that those objections have been withdrawn.

Rejection of claims 1-7— 35 USC 103

The rejection of claims 1-7 as being unpatentable over Dolganow in view of McLean is respectfully traversed.

At best, the motivation of “adaptively managing bandwidth on optical links...” as disclosed by McLean provides a motivation for implementing, in Dolganow, the scheme disclosed by McLean for allocating bandwidth in discrete bandwidth amounts. Thus while the person of ordinary skill might be motivated (as the Office action suggests) to implement teachings of McLean in Dolganow in order to adaptively manage bandwidth on optical links shared by multiple services, this simply results in a modification of Dolganow’s bandwidth management scheme per the teachings of McLean.

However, there is nothing in McLean that would motivate the person of ordinary skill to change other aspects of Dolganow such as, in the present case, the criterion under which one should advertise an amount of available bandwidth for a link.

Moreover, no obvious combination of Dolganow with McLean would result in anything that applicants’ independent claim 1 would read on.

Contrary to claim 1, Dolganow’s thresholds for deciding when to advertise the available bandwidth of a link are not independent of the amount of bandwidth available for the link at a given time. Nor are the advertisements in Dolganow sent “in response to said available bandwidth having crossed any one of a plurality of fixed bandwidth thresholds.” It is believed that the examiner concurs in this, which is why McLean has now been cited in connection with Dolganow.

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But the person of ordinary skill—in implementing into Dolganow the cited teachings from McLean—would, at best, find it obvious to use McLean's adaptive bandwidth management scheme, in Dolganow, while continuing to use Dolganow's available bandwidth message scheme. The motivation of being able to “adaptively manage bandwidth on optical links” provides no motivation one way or the other to use any particular criterion for deciding when to advertise a link's available bandwidth.

The Office action returns several times to the assertion that there is a justification for combining Dolganow with McLean. But that is not the end of the matter. The examiner characterizes applicants' position as being that there is no justification for combining Dolganow with McLean. But that has never been applicants' position, as a review of applicants RESPONSE of 02/21/08 will make clear.

There are at least two aspects of any obviousness-based rejection. One aspect is whether is it obvious to combine. The other is whether, if it is obvious to combine, what is it that results from what is obviousness. That is, given the teachings of the references and/or the art generally, what is it that is obvious to the person of ordinary skill?

In this case, no modification of Dolganow rendered obvious by McLean—whether related to bandwidth advertisements or not—would result in claim 1's recitation that advertising an amount of available bandwidth for a link is carried out “in response to said available bandwidth having crossed any one of a plurality of fixed bandwidth thresholds that are independent of the amount of bandwidth available for the link at a given time.” Rather, any obvious combination of Dolganow with McLean would continue to issue available bandwidth advertisements in response to what is taught in Dolganow in that regard, for the reasons discussed above. And that is something on which claim 1 simply does not read.

What the prior art knows how to do relative to the issuing of available bandwidth advertisements is to issue them based on either a) a percentage change or b) a particular amount of change of the available bandwidth. Nothing in the cited

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references renders obvious applicants' scheme of issuing available bandwidth advertisements "in response to" the crossing of bandwidth thresholds as recited in claim 1. No obvious combination of Dolganow and McLean reads on those claims.

Rejection of claims 8-12— 35 USC 103

The rejection of claims 8-12 as being unpatentable over McLean in view of Dolganow is respectfully traversed.

Firstly, it is noted that McLean is directed to a very different type of system than Dolganow and it is not clear that Dolganow's teaching of sending available bandwidth messages in the type of network disclosed by Dolganow would have any use or meaning in a network such as disclosed by McLean.

But even if it were obvious to use available bandwidth messages in McLean, the person of ordinary skill would not be led to modify McLean per the teachings of Dolganow in any way that would arrive at something that claim 8 would read on.

McLean adds and removes circuit bandwidths when thresholds based on percentage of utilization are crossed [0033]. Although McLean may add or subtract bandwidth in discrete, fixed amounts, that says nothing about what's to be done in the context of what is called for in claim 8.

In particular, claim 8 defines the invention in the context of what happens when one is identifying a path through the network in response to a request to set up a circuit (lines 7-9). In doing that, one has to find links with enough bandwidth for the circuit requested and, to that end, claim 8 further recites that that determination is made from available bandwidth messages each indicating an amount of available bandwidth for a respective link (lines 10-12). As the Office action recognizes, McLean does not say anything about such messages, which is why the rejection invokes Dolganow for its teaching of sending such messages.

Applicants will assume for purpose of argument that it would be obvious to add to McLean the ability to transmit available bandwidth messages. But the relevant question is: When are such messages sent? A big problem in the prior art is that if an

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available bandwidth message were sent every time the amount of bandwidth available on a link changes, that would clog up the system with too many such messages.

So what is the criterion for deciding when to send an available bandwidth message?

Dolganow uses a criterion that is different from applicants' as the Office action seems to recognize in its discussion of Dolganow relative to the rejection of claim 1. Specifically, Dolganow sends a new available bandwidth message when there has been percent change from the last advertised bandwidth. By contrast, applicants' invention as defined by claim 8, lines 13-17, transmits an available bandwidth message when the available bandwidth on a link has increased (or decreased) to a next higher (or lower) one of a number of predetermined circuit bandwidths.

Not only does Dolganow not disclose applicants' criterion for when a message is to be sent, but neither McLean nor McLean in combination with Dolganow render it obvious to use applicants' criterion instead of Dolganow's in deciding when to send out an available bandwidth message.

First of all, we have an explicit disclosure in Dolganow as to the criterion that Dolganow thinks is best. That criterion is the one that the person skilled in the art would be led to use having the references in front of him/her. It is unsupportable to suggest that the person skilled in the art would look to McLean to decide on what would be a good criterion for deciding when to send an available bandwidth message when Dolganow is the only one of the two references that says anything about such messages.

Moreover, even if the person skilled in the art might look to McLean, there is nothing in McLean's disclosure of adding bandwidth in discrete amounts when the bandwidth utilization crosses some threshold that would tell the person of ordinary skill when it would be a good idea to send available bandwidth messages. The Office action implies that the person skilled in the art would use the fact that bandwidth had

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been added or removed in McLean as the basis for deciding to sending out an available bandwidth message in the proposed McLean/Dolganow combination.

However, McLean changes bandwidths only based on only two bandwidth adjustment limits—a high and a low. A person skilled in the art knows that in order for available bandwidth messages to be effective, one wants to have as good as information as possible to as how much bandwidth is actually available on each link. There is a big middle ground between McLean's upper and lower adjustment limits—a middle ground where the amount of available bandwidth might be changing but no extra bandwidth capacity is added or removed to the link per McLean's teachings, and therefore no available bandwidth message would be sent.

It might be true that sending an available bandwidth message in response to the crossings of McLean's upper and lower limits would be better than sending no such messages at all. But it's obviously a suboptimal approach for the reasons stated above, and there's no reasonable basis to conclude that the person skilled in the art would "go there" when Dolganow and the prior art generally teach something that would be much better.

The fact that one could use only McLean's upper and lower limits for this purpose doesn't mean that it would even occur to the person of ordinary skill to do so.

Rejection of claims 13-16— 35 USC 103

Arguments similar to those set forth above relative to independent claim 8 apply with equal force to independent claim 13, and thus to its dependent claims 14-16.

Rejection of claims 17-18— 35 USC 103

Claims 17 and 18 reference claims discussed above and are submitted to be allowable for the same reasons.

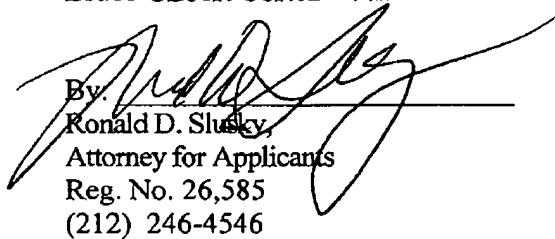
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In view of the foregoing, it is submitted that each of the independent claims 1, 8 and 13 is in condition for allowance. Thus their respective dependent claims are also in condition for allowance and applicants do not see the need at the present moment to address the grounds of rejection set forth in the Office action with respect to the dependent claims. This is not intended, however, to indicate that applicants necessarily agree with the grounds of rejection set forth in the Office action relative to the dependent claims.

Reconsideration is requested.

Respectfully submitted,
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Date: 09/12/2008